

## CLAIMS

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1. A hot plate unit comprising a supporting case and a substrate equipped with a temperature adjustment means; said  
5 substrate being fitted to said supporting case,  
wherein the thickness of said supporting case is 50 mm or less.
2. The hot plate unit according to claim 1,  
10 wherein said temperature adjustment means is a resistance heating element.
3. The hot plate unit according to claim 1 or 2,  
wherein said temperature adjustment means is a cooling  
15 means.
4. The hot plate unit according to any of claims 1 to 3,  
wherein the ratio of the thickness  $l$  of said substrate to the thickness  $L$  of said supporting case satisfies  $0.02 \leq$   
20  $l/L$ .
5. A hot plate unit comprising a supporting case and a substrate equipped with a temperature adjustment means; said  
25 substrate being fitted to said supporting case,  
wherein the ratio of the thickness  $l$  of said substrate to the thickness  $L$  of said supporting case satisfies  $0.02 \leq$   
 $l/L$ .
6. The hot plate unit according to claim 5,  
30 wherein said temperature adjustment means is a resistance heating element.
7. The hot plate unit according to claim 5 or 6,  
wherein said temperature adjustment means is a cooling  
35 means.

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8. The hot plate unit according to any of claims 5 to 7,  
wherein the thickness of said supporting case is 50 mm  
or less.

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9. A hot plate unit comprising a supporting case and a ceramic  
substrate equipped with a resistance heating element composed  
of one or more circuit(s); said ceramic substrate being fitted  
to said supporting case,

10 wherein the thickness of said supporting case is 50 mm  
or less.

10. The hot plate unit according to claim 9,  
wherein the ratio of the thickness  $l$  of said substrate  
15 to the thickness  $L$  of said supporting case satisfies  $0.02 \leq l/L$ .

11. The hot plate unit according to claim 9 or 10,  
wherein:

20 said supporting case is equipped with a bottom plate in  
the lower part; and

a conductive wire connected to an end portion of said  
resistance heating element and/or a wiring led out of a  
heat-measuring element installed in said ceramic substrate  
25 are/is withdrawn from a through hole formed in said bottom plate.

12. The hot plate unit according to claim 11,  
wherein a coolant introducing pipe is disposed in said  
bottom plate.

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